

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL – MAY 2025

Fifth Semester

Chemical Engineering

CH3005 - Petrochemical Technology

Regulations – 2021

Duration : 3 Hrs

Maximum : 100 Marks

PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	Questions	BLT	CO	Marks
1.	What is the major classification of feed stocks for any petroleum industries?	L1	1	2
2.	What are the key aspects of this integration with refinery?	L1	1	2
3.	List the chemicals derived from Ethylene.	L2	2	2
4.	What is BTX?	L2	2	2
5.	Write a short note on cumene.	L1	3	2
6.	Write the conversion of maleic anhydride from benzene.	L1	3	2
7.	What is PVC?	L2	4	2
8.	What is ABS? Mention its applications.	L3	4	2
9.	List out industrial lubricants.	L1	5	2
10.	What is the significance of the NPK?	L2	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11.	a i Explain the growth and development of petrochemicals industries in India.	L2	1	8
	ii Classify the petrochemicals.	L2	1	8
	Or			
	b Describe the details about refinery with a neat flow diagram.	L2	1	16
12.	a Explain the production of Ethylene and Propylene.	L3	2	16
	Or			
	b Describe the production and products of toluene with a neat flow diagram.	L3	2	16
13.	a Describe the production of Maleic Anhydride from butane with a neat flow diagram.	L3	3	16
	Or			
	b Explain in detail the production of Acrylic acid.	L3	3	16

14.	a	Describe the production of HDPE by Ziegler process with a diagram.	L3	4	16
Or					
	b	Explain the production of polypropylene in detail with a neat flow diagram.	L3	4	16
15.	a	Explain the process to produce high quality lubricants.	L3	5	16
Or					
	b	Discuss the uses and applications of urea and NPK.	L3	5	16